

IV.—*Descriptions of Ten new Species of Terrestrial Mollusca from South Africa.* By JAMES COSMO MELVILL, M.A., F.L.S., and JOHN HENRY PONSONBY, F.Z.S.

[Plate VIII.]

SINCE our last paper * on the subject we have received several shells which appear to be hitherto undescribed. To one of these—a *Dorcasia*—we would direct special attention, on account of its remarkable characters. Amongst the novelties are several interesting *Enneæ*, and as in so critical a genus it is imperative that all the species should be figured, we have pleasure in including a figure of *E. consobrina*, Ancy (see Brit. Naturalist, 1892, p. 125), acknowledging at the same time our indebtedness to Mr. Brockton Tomlin, who has kindly entrusted us with his type specimen for the purpose.

Natalina caffrula, sp. n. (Pl. VIII. fig. 1.)

N. testa depresso-conica, tenui, late et profunde umbilicata, supra parum nitente, sed subtus corusea, corneo-olivacea: anfractibus quinque, ventricosulis, undique superne striis obliquis longitudinaliter decoratis, ultimo rapide accrescente, striis infra medium evanidis; apertura ovato-lunari; peristomate tenui, simplici. Diam. max. $11\frac{1}{2}$, min. $9\frac{1}{2}$; alt. $5\frac{1}{3}$ mm.

Hab. Knysna.

An interesting species, depressedly conical, thin, widely and deeply umbilicate, basally shining, horny-olivaceous in colour; five-whorled, the whorls slightly ventricose, ornamented above with longitudinal oblique striæ; the last whorl increases rapidly; below the middle the striæ become obsolete; the aperture is ovate-lunar; peristome thin, simple. The specific name is suggested by the resemblance of the shell to that of a diminutive *N. caffra*, Fér.

Ennea caryatis †, sp. n. (Pl. VIII. fig. 2.)

E. testa parva, recta, cylindriformi, tenuissima, albido-pellucida, apice obtuso; anfractibus septem, apud suturas distincte impressis, vitreis, undique longitudinaliter striatulis, striis apud medium evanescentibus, infra levibus, anfractu ultimo paullum producto, fere levi; apertura rotundo-ovata; peristomate albo, pellucido, incrassato, dentibus plicisve quatuor instructo, plica

* Ann. & Mag. Nat. Hist. (6) vol. xix. p. 633.

† *καρύτης*, in architecture, an ornamental pillar.

parietali acinaciformi, intrante, dente labiali permagno, basali parvo, plica columellari dentiformi, valde intrante.
Long. 3·50, lat. 1 mm.

Hab. "S. Africa" (*Farquhar*).

Nearly allied to *E. cimolia* and *E. Margarettae*, M. & P.* From the first-named it differs in its slightly smaller size and in the whorls being partially longitudinally striate, *E. cimolia* being completely smooth; the mouth-processes are likewise different, that species possessing only three teeth or plaits, whilst *E. caryatis* has a basal tooth as well. From *E. Margarettae* it differs chiefly in the comparatively slight sinuosity of the outer lip, whilst the whorls in the last-named species are *completely* covered with fine longitudinal oblique striæ.

This pretty little *Ennea* was kindly presented to us for description by Mr. T. Rogers, of Manchester.

Ennea auris leporis †, sp. n. (Pl. VIII. fig. 3.)

E. testa crassiuscula, rimata, obesa, dolioliformi, cinerea; anfractibus septem, ad suturas paullum impressis, undique longitudinaliter obliqui-striatis, striis rudibus, crassiusculis; apertura trigonali; peristomate albo, incrassato, nitido, aurito, postice scrobiculato, intus multiplicato, plica parietali conspicua, acinaciformi, valde intrante, labiali dentiformi, profunde interna, plica basali simul ac columellari internis; fauce ima dentibus quinque vel sex contiguis, omnino internis, contra aperturam appositis, obstructa.
Long. 7, lat. 2·50 mm.

Hab. Natal.

A very distinct form, stout, tun-shaped, with obtuse apex, coarsely obliquely striate; mouth triangular, almost closed by the contiguous plaits and teeth. These are four in number: the parietal plait is conspicuous, the labial tooth-shaped, both, with the basal and columellar, are deep-seated and produced far down the throat, whilst five or six teeth are deep-seated at the base of the last whorl.

Ennea cionis ‡, sp. n. (Pl. VIII. fig. 4.)

E. testa cylindriformi, obtusa, semipellucida, pallide straminea; anfractibus, apicali incluso, septem, supremis tumidulis, penultimo et ultimo rectis, undique longitudinaliter obliqui-striatis, striis delicatulis, nitidis; apertura ovato-trigonali; peristomate incrassato, albo, nitido, plicis vel dentibus quinque instructo,

* Ann. & Mag. Nat. Hist. (6) vol. xvi. pp. 478, 479.

† *auris leporis*, hare's ear, from the shape of the peristome.

‡ *cionis*, dim. of *κίων*, a pillar.

plica parietali permagna, acinaciformi, dente labiali bifido, dente basali acuto, parvo, plica columellari magna, nitida, valde intrante.

Long. 4, lat. 1.75 mm.

Hab. Port Elizabeth (*Crawford*).

A cylindric form columnar little *Ennea*, possessing many of the familiar characteristics of the genus, in being of a pale straw-colour, seven-whorled, including the obtuse apical whorl; upper whorls slightly ventricose, the last two straight; peristome shining white, thickened, furnished with the following plaits or teeth:—a very large parietal plait, externally prominent, scimitar-shaped; a bifid labial and a small acute basal tooth; and a large columellar process, deep-seated, yet almost reaching the outer lip.

Next *E. vanstaadensis*, M. & P., but stouter and not so elongate.

Several specimens.

Ennea Crawfordi, sp. n. (Pl. VIII. fig. 5.)

E. testa parva, brevi, dolioliformi, apice perobtusos, pallide cinereo-straminea, tenui; anfractibus sex, ad suturas impressis, ventricosis, primis tumidioribus, cæteris rectis, undique longitudinaliter oblique rudi-striatis: apertura trigono-rotunda; peristomate albo, nitido, incrassato, plicis dentibusve quatuor munito, plica parietali acinaciformi, tenui, intrante, dente labiali magno, acuto, basali minore, plica columellari interna, mammæformi.

Long. 3.50, lat. 1.40 mm.

Hab. Port Elizabeth (*Crawford*).

Four specimens of an interesting small species, which, while possessing no specially marked characteristics, we find ourselves unable to match with any yet described. It is small, short, cylindric form, with extremely obtuse apex, thin, six-whorled, impressed at the sutures; upper whorls somewhat tumid, while the lower are straight, all longitudinally rudely striate; peristome thickened, white, furnished with the following plaits or teeth:—a thin scimitar-shaped parietal plait, a large acute labial tooth, the basal being also acute but smaller, while the internal columellar process is nipple-shaped, deep-seated.

We have much pleasure in associating with this little species the name of Mr. J. Crawford, from whom we have received so much interesting material.

Ennea Rogersi, sp. n. (Pl. VIII. fig. 6.)

E. testa rimata, crassiuscula, apice obtusissimo, breviter cylindriciformi; anfractibus septem, paullum tumidis, ad suturas impressis,

undique longitudinaliter crassi-striatis, quatuor ultimis rectis, inter se similibus; apertura rotundo-lunari; peristomate circulari, plicis vel dentibus duobus solum munito, plica parietali acuta, acinaciformi, valde intrante, dente labiali acuto, parvo, margine columellari infra paullum incrassato, simplici.

Long. 5, lat. 2 mm.

Hab. "Cradock Comonage, S. Africa" (e coll. T. Rogers).

In its mouth-processes this *Ennea* resembles *E. Collieri*, M. & P., but not in form, texture, or any other particular. It is also comparable with *E. crassilabris*, Craven, which species is very much larger in all its parts.

Though small, it is an attractive and very beautiful species, columnar, seven-whorled, the last four being uniform and straight; the peristome is circular, furnished with one parietal plait, large and deep-seated, one labial tooth likewise, while the columellar margin is to some extent callous and thickened below.

We have pleasure in connecting with this species the name of Mr. Thomas Rogers, of Oldham Road, Manchester, from whom we received it. We believe it was collected by Mr. Farquhar.

Ennea dokimasta *, sp. n. (Pl. VIII. fig. 7.)

E. testa compacta, brevi, cylindracea, apice obtusissimo, pallide straminea, nitida; anfractibus septem, apud suturas compressis, undique longitudinaliter oblique striatis, striis comptis, aretis; apertura rotunda; peristomate semilunari, extus incrassato, stramineo, intus albescente, plicis vel dentibus quinque munito, plica parietali permagna, dentibus labialibus duobus, ordinariis, dente basali parvo, plica columellari interna, magna, valde intrante.

Long. 5, lat. 2.50 mm.

Hab. Natal.

A remarkably short cylindraceous *Ennea*, with very obtuse apex, straw-coloured, seven-whorled, longitudinally neatly and closely striate; the outer lip is roundly semilunar, thickened, without straw-coloured, within shining white, furnished with five plaits or teeth; of these the parietal plait is extremely large and protruded, the two labial and the basal teeth are normal, the columellar plait is very distinct, being unusually developed, internal, and deep-seated.

We have seen few, if any, species of this genus with so conspicuous a parietal plait or possessing the same characteristics as to the columellar process, which is not mammi-

* δοκίμαστος, tried, proved.

form at all, as is the case in *E. thelodonta* and other allied forms.

We received the above from Mr. Robert Cairns, of Ashton-under-Lyne.

Ennea eximia *, sp. n. (Pl. VIII. fig. 8.)

E. testa obesa, cylindracea, apice obtusissimo, semipellucida, albida vel pallide straminea; anfractibus octo, ad suturas impressis, paullum tumidulis, undique longitudinaliter oblique pulcherrime filo-striatis; apertura lunari; peristomate albido, nitido, incrassato, dentibus vel plicis quatuor instructo, plica parietali intrante, huic proximo parvo dente labiali, et, versus basin, altero dente labiali, in uno specimine bifido, plica columellari interna, valde intrante, planiuscula.

Long. 9, lat. 4 mm.

Hab. Between Delagoa Bay and Barberton, Transvaal.

A large and conspicuous as well as remarkably beautiful species. It is whitish or pale straw-coloured, cylindraceous, stout, eight-whorled, the apex and apical whorls being exceedingly obtuse, longitudinally uniformly most evenly filostriate; the aperture is lunar; peristome white, thickened, with the following teeth or plaits:—a parietal thin, deep-seated; two labial, one close to the parietal plait and very small, the other larger, towards the basal region, and in one specimen bifid; the columellar plait is wholly internal, deep-seated, and flattened.

Two specimens.

DORCASIA, Gray.

§ TULBAGHINIA, subgen. nov.

Shell as in typical *Dorcasia*, excepting in the possession of three contiguous teeth, more or less well developed on the inner base of the peristome.

Dorcasia (Tulbaghinia) isomerioides, sp. n.
(Pl. VIII. fig. 10.)

D. testa depresso-orbiculari, profunde umbilicata, umbilico infundibuliformi, solidiuscula, albida, epidermide olivaceo-brunnea connecta, spira subconica, apice ipso planato; anfractibus quinque, ultimo rapide accrescente, undique longitudinaliter obliqui-striatis, striis rudibus inæqualibus; apertura obliqua, ovata, intus brunneo-cinerea; peristomate nitido, albo, fere continuo, paullum extus incrassato, reflexo, supra umbilicum dilatante, dentibus tribus parvis contiguis basalibus prædito.

Diam. max. $29\frac{1}{2}$, min. 25; alt. 12 mm.

Hab. Winterhoek Mountains, Tulbagh district.

† *Eximius*, choice.

Whilst in general form allied to *D. lucana*, Müll., and others of that section, so typical of the South-African fauna, this extraordinary shell, in the possession of three short contiguous basal peristomatal teeth, recalls the species of the South-American genus *Isomeria*. Nothing like this has before occurred in Africa; and we should have treated the discovery of one specimen alone, exhibiting such peculiarities, as a probable sport or monstrosity, but three examples occurred. One of these, whose teeth, though very distinct, were not quite so pronounced as those of the example selected for the type, was transversely banded with dark brown round the centre of the last whorl.

We have considered it desirable to institute a subgeneric name for this new form, and have suggested *Tulbaghinia*, from the district where it was found.

Achatina rhabdota *, sp. n. (Pl. VIII. fig. 11.)

A. testa medioeri, ovato-oblonga, tennui, ochraceo-straminea, apice obtuso; anfractibus septem, supernis decussato-granulosis, ultimo ad medium simili modo granuloso, infra, usque ad basin, lævi, nitido, undique flammis zebrinis longitudinaliter decoratis, ultimo prolongato; apertura oblonga; peristomate tenui, simplici, margine columellari ad basin truncato.

Long. 45, lat. 20 mm.

Hab. "South Africa."

In form resembling *A. ustulata*, Lam., though not quite so elongate; in marking like a miniature *A. zebra*, L. It does not seem to be a young shell, and we hardly conjecture that the species will be found to attain greater dimensions than that of the type before us.

It is handsome, painted with longitudinal close-lying zebrine flames, dark brown on a straw-coloured ground, the whole surface of the upper whorls and the upper portion of the last being delicately decussatedly granulose.

EXPLANATION OF PLATE VIII.

Fig. 1. *Natalina caffrula*.
Fig. 2. *Ennea caryatis*.
Fig. 3. — *auris leporis*.
Fig. 4. — *cionis*.
Fig. 5. — *Crawfordi*.
Fig. 6. — *Rogersi*.

Fig. 7. *Ennea dokimasta*.
Fig. 8. — *eximia*.
Fig. 9. — *consobrina*, Ancyey.
Fig. 10. *Dorcasia* (§ *Tulbaghinia*)
isomerioides.
Fig. 11. *Achatina rhabdota*.

* ῥάβδος, zebra-striped.